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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,759

11/10/2003

Jan Hirsimaki

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WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP  
BRADFORD GREEN, BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

CHEEMA, UMAR

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,759	<b>Applicant(s)</b> HIRSIMAKI, JAN	
	<b>Examiner</b> UMAR CHEEMA	<b>Art Unit</b> 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-16, 18-22 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-16, 18-22 and 25-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is response to the Amendment filed on 10/16/2008. Claims 1, 18-20, and 33 have been amended and claim 17 has been canceled.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, 6-16, 18-22, and 25-33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-3, 6-16, 18-22, and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicants Admitted Prior Art) in view of Apisdorf et al (Apisdorf) (US 6,480,977).

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4. Regarding claim 1, 19 and 20, AAPA discloses the invention as claimed a method, an apparatus, and a mobile terminal comprising: monitoring transport layer data traffic in relation to transmission capacity of a transport layer protocol connection that uses a data transmission service of a bearer, and dynamically adjusting said transmission capacity of said bearer according to said monitored data traffic of said transport layer protocol connection wherein said bearer provides uplink and downlink transmission capacity (see figure 1, and details associated; wherein transmission service is offered to the TCP layer by the bearer layer 20), wherein said data traffic of said transport layer protocol connection comprises uplink and downlink data traffic that is separately monitored (see figure 1 and the details associated; TCP Ctrl. 106), and wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic, wherein said Uplink and downlink data traffic is at least partially asymmetric (see figure 1 and details associated; wherein uplink and downlink data traffic is partially asymmetric).

5. AAPA substantially discloses the invention as claimed above for the given reason but does not explicitly disclose wherein said monitoring transport layer data traffic transmission capacity of TLP connection. In the same field of invention Apisdorf discloses wherein said monitoring transport layer data traffic transmission capacity of TLP connection (see abstract, col. 1, line 62- col. 2, line 21, figures 1-4 and details associated).

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6. It would have been obvious to one of the ordinary skill in the art of networking at the time of this invention to combine the teaching of AAPA into Apisdorf for method of improving transmission performance of a transport layer protocol (TLP) connection that uses a data transmission service of a bearer. Motivation for doing so would have been that it helps to determine how much traffic is transmitted through the link from which the information applied to monitor processor system is intercepted. This information can be used to improve network management and network operations (see Apisdorf: col. 3, lines 20-28).

7. Regarding claim 2, AAPA discloses the method according to claim 1, wherein said transport layer protocol is a transport control protocol or a user datagram protocol (see figure 1 and details associated; TLP may for instance be the TCP or UDP).

8. Regarding claim 3, AAPA discloses the method according to claim 1, wherein transmission capacity adjustment information is signaled from at least one transport control protocol instance to at least one bearer instance (see figure 1 and details associated; TLP may for instance be the TCP or UDP).

9. Regarding claim 4-5, (Cancelled).

10. Regarding claim 6, AAPA- Apisdorf discloses the method according to claim 1, wherein said data traffic of said transport layer protocol connection is monitored at least partially by monitoring a state of at least one transport layer protocol segment buffer (see AAPA figure 1 and details associated; Apisdorf: figures 2-3 and details associated).

11. Regarding claim 7, AAPA- Apisdorf discloses the method according to claim 1, wherein said data traffic of said transport layer protocol connection is monitored at least

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partially by monitoring data input to at least one transport layer protocol socket (see AAPA figure 1 and details associated; Apisdorf: figures 2-3 and details associated).

12. Regarding claim 8, AAPA discloses the method according to claim 1, wherein said bearer is a packet-switched or circuit-switched bearer (see figure 1 and details associated).

13. Regarding claim 9, AAPA discloses the method according to claim 1, wherein said bearer is at least partially based on wireless transmission (see figure 1 and details associated; wireless bearer transmission links 60a and 60b).

14. Regarding claim 10, AAPA discloses the method according to claim 1, wherein said bearer is a high-speed circuit switched data bearer of a global system for mobile communication or of a derivative thereof (see figure 1 and details associated).

15. Regarding claim 11, AAPA discloses the method according to claim 10, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said transport layer protocol connection by changing a maximum number of traffic channels, at least one air interface user rate parameter, or both (see figure 1 and details associated).

16. Regarding claim 12, AAPA discloses the method according to claim 11, wherein said change is performed by using a call control user initiated service level up- and downgrading procedure (see figure 1 and details associated).

17. Regarding claim 13, AAPA discloses the method according to claim 1, wherein said bearer is a general packet radio service bearer or an enhanced bearer of a global

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system for mobile communications or of a derivative thereof (see figure 1 and details associated).

18. Regarding claim 14, AAP discloses the method according to claim 13, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said transport layer protocol connection by influencing a temporary block flow setup (see figure 1 and details associated).

19. Regarding claim 15, AAPA discloses the method according to claim 1, wherein said bearer is a bearer that uses code division multiple access as medium access technique, in particular a bearer of an IS-95 system or of a derivative thereof (see figure 1 and details associated).

20. Regarding claim 16, AAPA discloses the method according to claim 1, wherein said bearer is a universal mobile telecommunications system bearer or a bearer of a derivative of said system (see figure 1 and details associated).

21. Regarding claim 17, (Cancelled).

22. Regarding claim 18, AAPA discloses a computer readable medium stored with instructions, which when executed by a processor, performs the method of claim 1 (see figure 1 and details associated).

23. Regarding claim 21-22, these claimed limitations have already been addressed above (see claims 2-3 above).

24. Regarding claims 23-24, (Cancelled).

25. Regarding claim 25-32, these claimed limitations have already been addressed above (see claims 6-10, 13 and 15-16 above).

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26. Regarding claim 33, AAPA discloses the invention as claimed in claim 1 above with further having at least one terminal, and at least one network interface (see figure 1 and associated details; a mobile terminal and interface 206). Therefore claim 33 is rejected for same reasons as shown in claim 1 above.

### ***Conclusion***

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone



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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C./

Examiner, Art Unit 2444

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444